IAD 161 OL1: The Golden Section and Sacred Geometry - Module 14 - Final Project



The Blooming Mandala Project

Created by Steve Williams IAD 161 OL1: The Golden Section and Sacred Geometry Assignment 14.2 - Final Project

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CONCEPT STATEMENT

Goal

The goal of the blooming mandala project was to create a mandala based on the golden section and the fibonacci sequence, to create a work of art that is representative of natural beauty found in mathematics and geometry. Inspired by the sand mandalas created by buddhist monks in eastern traditions, the blooming mandala was created from a variety of colored sand, and after the completion of the mandala, the sand will be wiped away to represent the temporary beauty of life that can quickly be wiped away.

Concept

The blooming mandala construction consists of various geometrical representations of the golden section and fibonacci sequence. There are three hexagonal flower constructions at a size ratio of 3, 5, and 8. Behind each flower is a golden rectangle in green. The red rings are at a diameter of 1, 3, 5, 8, and 13, and width of the outer stroke in Points is determined by the corresponding number times Phi, rounded to the nearest integer. For instance, the red circle with an inner diameter of 5 would have an outer diameter of approximately 8 points. The 8-inch ring would have a width of approximately 13 points. This incorporates both Phi and the Fibonacci sequence into the construction of the mandala.

Design Process

The blooming mandala construction was first created digitally as a vector in Adobe Illustrator. The final construction was created after experimenting with the flower-like hexagon construction at different sizes and rotations to create the entrancing look of a mandala. The fibonacci sequence inspired the basis of the final design, with the different elements being sized at units of 1, 3, 5, 8, 13, and so on.

Execution

The final mandala was created at a 2' x 2' size which was a few inches larger than designed in the digital rendering. The scaling was done by printing a proof of the design and plotting various points on a piece of painted plywood. To draw the larger circles involved in the construction, a compass was created by nailing foam board to the center of the plywood and using another nail to poke a hole through the foam board, scratching a line into the newly painted surface of the plywood. After the scaled-up construction was created, different colored sands were carefully arranged onto the surface of the plywood to create the completed sand mandala. After photographing and documenting the work, it will be swept into a pile and put into a jar as a gift for my daughter, in hopes that she will benefit from the knowledge that a beautiful work of art was made from what later became just a pile of sand.

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RESEARCH & INSPIRATION









STEVE WILLIAMS IAD 161 OL1: The Golden Section and Sacred Geometry - Module 14 - Final Project

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CONSTRUCTION LINE DRAWING



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DIGITAL LINE CONSTRUCTION



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COLORED DIGITAL CONSTRUCTION



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COMPLETED SAND MANDALA



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COMPLETED SAND MANDALA

